

1600 1632
#21

Serial Number:

09/341,894A

CRF Processing Date:

12/4/2002

Edited by:

Verified by:

(STIC staff)

ENTERED

- ☐ Changed a file from non-ASCII to ASCII
- ☐ Changed the margins in cases where the sequence text was "wrapped" down to the next line.
- ☐ Edited a format error in the Current Application Data section, specifically: _____
- ☐ Edited the Current Application Data section with the actual current number. The number inputted by the applicant was ☐ the prior application data; or ☐ other _____
- ☐ Added the mandatory heading and subheadings for "Current Application Data".
- ☐ Edited the "Number of Sequences" field. The applicant spelled out a number instead of using an integer.
- ☐ Changed the spelling of a mandatory field (the headings or subheadings), specifically: _____
- ☐ Corrected the SEQ ID NO when obviously incorrect. The sequence numbers that were edited were: _____
- ☐ Inserted or corrected a nucleic number at the end of a nucleic line. SEQ ID NO's edited: _____
- ☐ Corrected subheading placement. All responses must be on the same line as each subheading. If the applicant placed a response below the subheading, this was moved to its appropriate place.
- ☐ Inserted colons after headings/subheadings. Headings edited included: _____
- ☐ Deleted extra, invalid, headings used by an applicant, specifically: _____
- ☒ Deleted: ☒ non-ASCII "garbage" at the beginning/end of files; ☐ secretary initials/filename at end of file; ☐ page numbers throughout text; ☐ other invalid text, such as _____
- ☐ Inserted mandatory headings, specifically: _____
- ☐ Corrected an obvious error in the response, specifically: _____
- ☐ Edited identifiers where upper case is used but lower case is required, or vice versa.
- ☐ Corrected an error in the Number of Sequences field, specifically: _____
- ☐ A "Hard Page Break" code was inserted by the applicant. All occurrences had to be deleted.
- ☐ Deleted *ending* stop codon in amino acid sequences and adjusted the "(A)Length:" field accordingly (error due to a PatentIn bug). Sequences corrected: _____
- ☐ Other: _____

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DEC 10 2002

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*Examiner: The above corrections must be communicated to the applicant in the first Office Action. DO NOT send a copy of this form.



1600

RAW SEQUENCE LISTING

DATE: 12/04/2002

PATENT APPLICATION: US/09/341,894A

TIME: 20:57:23

Input Set : A:\PTO.AMC.txt

Output Set: N:\CRF4\12032002\I341894A.raw

5 <110> APPLICANT: Piechaczyk, Marc
 6 Noel, Daniele
 8 <120> TITLE OF INVENTION: Biological material for treating a mammal by antibody gene transfer and
 9 pharmaceutical composition containing same
 11 <130> FILE REFERENCE: 19904-002
 C--> 13 <140> CURRENT APPLICATION NUMBER: US/09/341,894A
 C--> 14 <141> CURRENT FILING DATE: 1999-12-15
 16 <150> PRIOR APPLICATION NUMBER: FR97/00540
 17 <151> PRIOR FILING DATE: 1997-01-20
 19 <160> NUMBER OF SEQ ID NOS: 4
 21 <170> SOFTWARE: PatentIn version 3.1
 23 <210> SEQ ID NO: 1
 24 <211> LENGTH: 420
 25 <212> TYPE: DNA
 26 <213> ORGANISM: Mus musculus
 28 <220> FEATURE:
 29 <221> NAME/KEY: CDS
 30 <222> LOCATION: (1)..(420)
 31 <223> OTHER INFORMATION:
 33 <220> FEATURE:
 34 <221> NAME/KEY: misc_feature
 36 <222> LOCATION: (1)..(420)
 37 <223> OTHER INFORMATION: Sequence coding for the variable region of the antibody heavy
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 38 ain
 W--> 40 <220>
 41 <221> NAME/KEY: sig_peptide
 43 <222> LOCATION: (1)..(57)
 44 <223> OTHER INFORMATION:
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 48 Met Gly Trp Leu Trp Asn Leu Leu Phe Leu Met Ala Ala Ala Gln Ser
 49 1 5 10 15
 51 gcc caa gga cag atc cac ttg gta cag tct gga cct gag ctg aag aag 96
 52 Ala Gln Gly Gln Ile His Leu Val Gln Ser Gly Pro Glu Leu Lys Lys
 53 20 25 30
 55 cct gga gag aca gtc aag atc tcc tgc aag gct tct ggg tat acc ttc 144
 56 Pro Gly Glu Thr Val Lys Ile Ser Cys Lys Ala Ser Gly Tyr Thr Phe
 57 35 40 45
 59 aca tcg tat ggc ttg acc tgg gtg ata cag tct cca gga aag gat tta 192
 60 Thr Ser Tyr Gly Leu Thr Trp Val Ile Gln Ser Pro Gly Lys Asp Leu
 61 50 55 60
 63 aaa tgg atg ggc tgg ata aac acc ttc tct gga gtg cca aca tat gct 240

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64 Lys Trp Met Gly Trp Ile Asn Thr Phe Ser Gly Val Pro Thr Tyr Ala

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Input Set : A:\PTO.AMC.txt

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65 65          70          75          80
67 gat gac ttc aag gga cgc ttt gcc ttc tct ttg gac acc tct acc agc      288
68 Asp Asp Phe Lys Gly Arg Phe Ala Phe Ser Leu Asp Thr Ser Thr Ser
69          85          90          95
71 act gcc tat ttg cag atc gac aac ctc aaa aat gag gac acg gct aca      336
72 Thr Ala Tyr Leu Gln Ile Asp Asn Leu Lys Asn Glu Asp Thr Ala Thr
73          100          105          110
75 tat ttc tgt tca aga agg ggg ggt ttt att act acg gct ctt gac acc      384
76 Tyr Phe Cys Ser Arg Arg Gly Gly Phe Ile Thr Thr Ala Leu Asp Thr
77          115          120          125
79 tgg ggc caa ggc acc tct ctc aca gtc tcc tca gcc      420
80 Trp Gly Gln Gly Thr Ser Leu Thr Val Ser Ser Ala
81          130          135          140
84 <210> SEQ ID NO: 2
85 <211> LENGTH: 140
86 <212> TYPE: PRT
87 <213> ORGANISM: Mus musculus
89 <220> FEATURE:
90 <221> NAME/KEY: misc_feature
91 <222> LOCATION: (1)..(420)
92 <223> OTHER INFORMATION: Sequence coding for the variable region of the antibody heavy

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ch

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93      ain
95 <400> SEQUENCE: 2
97 Met Gly Trp Leu Trp Asn Leu Leu Phe Leu Met Ala Ala Ala Gln Ser
98 1          5          10          15
101 Ala Gln Gly Gln Ile His Leu Val Gln Ser Gly Pro Glu Leu Lys Lys
102          20          25          30
105 Pro Gly Glu Thr Val Lys Ile Ser Cys Lys Ala Ser Gly Tyr Thr Phe
106          35          40          45
109 Thr Ser Tyr Gly Leu Thr Trp Val Ile Gln Ser Pro Gly Lys Asp Leu
110          50          55          60
113 Lys Trp Met Gly Trp Ile Asn Thr Phe Ser Gly Val Pro Thr Tyr Ala
114 65          70          75          80
117 Asp Asp Phe Lys Gly Arg Phe Ala Phe Ser Leu Asp Thr Ser Thr Ser
118          85          90          95
121 Thr Ala Tyr Leu Gln Ile Asp Asn Leu Lys Asn Glu Asp Thr Ala Thr
122          100          105          110
125 Tyr Phe Cys Ser Arg Arg Gly Gly Phe Ile Thr Thr Ala Leu Asp Thr
126          115          120          125
129 Trp Gly Gln Gly Thr Ser Leu Thr Val Ser Ser Ala
130          130          135          140
133 <210> SEQ ID NO: 3
134 <211> LENGTH: 420
135 <212> TYPE: DNA
136 <213> ORGANISM: Mus musculus
138 <220> FEATURE:
139 <221> NAME/KEY: CDS
140 <222> LOCATION: (1)..(420)
141 <223> OTHER INFORMATION:

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Input Set : A:\PTO.AMC.txt

Output Set: N:\CRF4\12032002\I341894A.raw

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144 <221> NAME/KEY: misc_feature
145 <222> LOCATION: (1)..(420)
146 <223> OTHER INFORMATION: Sequence coding for the variable region of the antibody
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147      ain
W--> 149 <220>
150 <221> NAME/KEY: sig_peptide
151 <222> LOCATION: (1)..(57)
152 <223> OTHER INFORMATION:
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155 atg aag ttg cct ggt agg ctg ttg gtg ctg atg ttc tgg att cct gct      48
156 Met Lys Leu Pro Gly Arg Leu Leu Val Leu Met Phe Trp Ile Pro Ala
157 1      5      10      15
159 tcc aat agt aat gtt gtg atg acc caa act cca ctc tcc ctg tct gtc      96
160 Ser Asn Ser Asn Val Val Met Thr Gln Thr Pro Leu Ser Leu Ser Val
161      20      25      30
163 agt ctt gga gat caa gcc tcc atc tct tgc aga tct agt cag agc att      144
164 Ser Leu Gly Asp Gln Ala Ser Ile Ser Cys Arg Ser Ser Gln Ser Ile
165      35      40      45
167 gta cat agt aat gga aac acc tat tta gaa tgg tac ctg cag aaa cca      192
168 Val His Ser Asn Gly Asn Thr Tyr Leu Glu Trp Tyr Leu Gln Lys Pro
169      50      55      60
171 ggc cag tct cca aag ctc ctg atc tat aaa gtt tcc aac cga ttg tct      240
172 Gly Gln Ser Pro Lys Leu Ile Tyr Lys Val Ser Asn Arg Leu Ser
173 65      70      75      80
175 ggg gtc cca gac agg ttc agt ggc agt gga tca ggg aca gac ttc aca      288
176 Gly Val Pro Asp Arg Phe Ser Gly Ser Gly Ser Gly Thr Asp Phe Thr
177      85      90      95
179 ctc aaa atc agc aga gtg gag gct gag gat ctg gga ctt tat tac tgt      336
180 Leu Lys Ile Ser Arg Val Glu Ala Glu Asp Leu Gly Leu Tyr Tyr Cys
181      100      105      110
183 ttt caa ggt tca cat att cca ttc acg ttc ggt tcg ggg aca aag ttc      384
184 Phe Gln Gly Ser His Ile Pro Phe Thr Phe Gly Ser Gly Thr Lys Phe
185      115      120      125
187 gaa ata aaa cgg gct gat gct gca cca act gta tcc      420
188 Glu Ile Lys Arg Ala Asp Ala Ala Pro Thr Val Ser
189      130      135      140
192 <210> SEQ ID NO: 4
193 <211> LENGTH: 140
194 <212> TYPE: PRT
195 <213> ORGANISM: Mus musculus
197 <220> FEATURE:
198 <221> NAME/KEY: misc_feature
199 <222> LOCATION: (1)..(420)
200 <223> OTHER INFORMATION: Sequence coding for the variable region of the antibody
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201      ain
203 <400> SEQUENCE: 4
205 Met Lys Leu Pro Gly Arg Leu Leu Val Leu Met Phe Trp Ile Pro Ala
206 1      5      10      15

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Output Set: N:\CRF4\12032002\I341894A.raw

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209 Ser Asn Ser Asn Val Val Met Thr Gln Thr Pro Leu Ser Leu Ser Val
210          20          25          30
213 Ser Leu Gly Asp Gln Ala Ser Ile Ser Cys Arg Ser Ser Gln Ser Ile
214          35          40          45
217 Val His Ser Asn Gly Asn Thr Tyr Leu Glu Trp Tyr Leu Gln Lys Pro
218          50          55          60
221 Gly Gln Ser Pro Lys Leu Leu Ile Tyr Lys Val Ser Asn Arg Leu Ser
222 65          70          75          80
225 Gly Val Pro Asp Arg Phe Ser Gly Ser Gly Ser Gly Thr Asp Phe Thr
226          85          90          95
229 Leu Lys Ile Ser Arg Val Glu Ala Glu Asp Leu Gly Leu Tyr Tyr Cys
230          100          105          110
233 Phe Gln Gly Ser His Ile Pro Phe Thr Phe Gly Ser Gly Thr Lys Phe
234          115          120          125
237 Glu Ile Lys Arg Ala Asp Ala Ala Pro Thr Val Ser
238          130          135          140

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VERIFICATION SUMMARY

DATE: 12/04/2002

PATENT APPLICATION: US/09/341,894A

TIME: 20:57:24

Input Set : A:\PTO.AMC.txt

Output Set: N:\CRF4\12032002\I341894A.raw

L:13 M:270 C: Current Application Number differs, Replaced Current Application Number
L:14 M:271 C: Current Filing Date differs, Replaced Current Filing Date
L:40 M:258 W: Mandatory Feature missing, <223> Blank for SEQ#:1,Line#:31
L:46 M:258 W: Mandatory Feature missing, <223> Blank for SEQ#:1,Line#:44
L:149 M:258 W: Mandatory Feature missing, <223> Blank for SEQ#:3,Line#:141
L:154 M:258 W: Mandatory Feature missing, <223> Blank for SEQ#:3,Line#:152